

TABLE 70

Innovation activity costs for R&D, by industry and employment size: 2018

(Thousands of U.S. dollars)

Industry	NAICS code	All companies	1-9 employees	10-49 employees	50-249 employees	250 or more employees
All industries	11, 21-23, 31-33, 42-81	257,725,139	47,128	10,540,042	14,105,821	233,032,148
Manufacturing industries	31-33	84,504,901	13,256	2,265,853	5,546,151	76,679,641
Food	311	3,281,200	442	24,785	1,362,384	1,893,589
Beverage and tobacco products	312	76,747	D	31,230	34,474	11,017
Textile, apparel, and leather products	313-16	139,734	0	13,127	28,991	97,616
Wood products	321	181,550	0	2,697	7,466	171,388
Paper	322	3,861,578	0	13,092	38,438	3,810,047
Printing and related support activities	323	69,939	0	10,516	13,193	46,230
Petroleum and coal products	324	107,464	0	2,431	3,652	101,380
Chemicals	325	24,212,216	12,471	156,093	726,460	23,317,192
Pesticide, fertilizer, and other agricultural chemical manufacturing	3253	116,636	0	2,325	3,761	110,550
Pharmaceuticals and medicines	3254	19,263,226	D	40,566	204,177	19,006,076
Soap, cleaning compound, and toilet preparation manufacturing	3256	663,981	0	29,855	15,188	618,938
Other chemicals	other 325	4,168,373	D	83,347	503,334	3,581,628
Plastics and rubber products	326	2,151,255	0	70,018	286,097	1,795,140
Nonmetallic mineral products	327	243,501	D	41,672	21,353	180,442
Primary metals	331	512,612	0	36,810	51,853	423,949
Fabricated metal products	332	1,795,105	D	322,298	552,771	919,912
Machinery	333	12,658,977	0	959,269	1,211,933	10,487,775
Computer and electronic products	334	13,744,178	D	303,114	612,613	12,828,292
Communications equipment	3342	632,168	D	35,943	45,773	550,359
Semiconductor and other electronic components	3344	7,749,075	0	66,039	126,410	7,556,626
Navigational, measuring, electromedical, and control instruments	3345	4,941,659	D	170,250	391,586	4,379,756
Other computer and electronic products	other 334	421,276	0	30,881	48,844	341,551
Electrical equipment, appliances, and components	335	2,902,418	0	121,556	189,923	2,590,939
Transportation equipment	336	11,668,474	0	69,647	147,864	11,450,963
Automobiles, bodies, trailers, and parts	3361-63	3,063,831	0	23,806	85,479	2,954,546
Aerospace products and parts	3364	7,868,486	0	41,982	35,382	7,791,122
Other transportation	other 336	736,156	0	3,859	27,003	705,295
Furniture and related products	337	333,503	0	18,700	87,506	227,297
Miscellaneous	339	6,564,452	0	68,798	169,180	6,326,474
Medical equipment and supplies	3391	6,290,959	0	35,953	53,981	6,201,025
Other miscellaneous manufacturing	3399	273,493	0	32,845	115,199	125,449
Nonmanufacturing industries	11, 21-23, 42-81	173,220,238	33,872	8,274,189	8,559,670	156,352,507
Agriculture, forestry, fishing, and hunting	11	32,619	0	4,747	D	D
Mining, extraction, and support activities	21	1,369,924	0	6,727	11,083	1,352,114
Utilities	22	61,001	0	2,058	D	58,915
Construction	23	1,791,021	0	180,052	800,928	810,041
Wholesale trade	42	50,734,201	12,270	1,267,202	545,714	48,909,015
Retail trade	44-45	20,658,045	2,941	404,258	331,259	19,919,588
Transportation and warehousing	48-49	316,329	0	86,341	10,871	219,118
Information	51	47,870,290	D	1,067,450	1,611,602	45,188,740
Publishing	511	36,005,615	0	484,905	790,134	34,730,576

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Newspaper, periodical, book, and directory publishers	5111	41,593	0	17,274	5,994	D	
Software publishers	5112	35,964,022	0	467,631	784,140	34,712,251	
Telecommunications	517	3,131,490	0	21,940	67,048	r 3,042,502	
Data processing, hosting, and related services	518	3,853,980	0	428,908	424,397	3,000,676	
Other information	other 51	4,879,205	D	131,697	r 330,023	4,414,986	
Finance and insurance	52	11,427,470	D	318,344	r 224,223	r 10,884,400	
Real estate and rental and leasing	53	170,885	D	72,171	r 5,011	r 93,660	
Lessors of nonfinancial intangible assets (except copyrighted works)	533	15,308	0	D	0	D	
Other real estate and rental and leasing	other 53	155,577	D	70,794	r 5,011	r 79,729	
Professional, scientific, and technical services	54	34,141,252	15,617	r 3,788,160	4,038,012	26,299,464	
Legal services	5411	23,048	0	6,801	r 1,712	14,535	
Accounting, tax preparation, bookkeeping, and payroll services	5412	87,894	0	14,607	9,102	64,185	
Architectural, engineering, and related services	5413	1,991,585	D	642,287	764,093	585,130	
Specialized design services	5414	31,674	r D	30,999	r D	0	
Computer systems design and related services	5415	13,395,497	D	1,349,042	905,272	11,139,237	
Management, scientific, and technical consulting services	5416	1,908,227	13,314	r 593,449	168,118	1,133,346	
Scientific research and development services	5417	15,278,959	0	1,052,693	2,052,095	12,174,171	
Advertising, public relations, and related services	5418	203,399	D	52,770	99,788	50,708	r
Other professional, scientific, and technical services	5419	1,220,970	0	45,511	r 37,308	r 1,138,152	
Management of companies and enterprises	55	D	0	0	D	D	
Administrative and support and waste management and remediation services	56	2,173,070	0	146,379	41,321	1,985,370	
Educational services	61	67,525	0	23,691	6,614	37,220	
Health care and social assistance	62	804,879	r 0	316,902	386,992	r 100,984	
Health care services	621–23	717,384	r 0	253,224	365,575	r 98,586	
Social assistance	624	87,495	0	63,679	r 21,418	r 2,398	
Arts, entertainment, and recreation	71	18,843	0	15,182	2,551	r D	
Accommodation and food services	72	897,107	0	306,638	515,583	r 74,886	
Other services	81	684,791	0	267,889	r 1,653	r 415,249	

D = withheld to avoid disclosing data for individual companies; data are included in higher-level totals. r = relative standard error > 50%.

NAICS = 2017 North American Industry Classification System.

Note(s):

Detail may not add to total because of rounding. Statistics are representative of companies located in the United States.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, 2019 Annual Business Survey: Data Year 2018.